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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,445	11/26/2003	Jorge R. Serrano	C0034	1197

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CORNING CABLE SYSTEMS LLC
C/O CORNING INC., INTELLECTUAL PROPERTY DEPARTMENT
SP-TI-3-1
CORNING, NY 14831

EXAMINER	
MAYO, TARA L	
ART UNIT	**PAPER NUMBER**
3671	

MAIL DATE	DELIVERY MODE
08/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/724,445	SERRANO ET AL.	
	Examiner	Art Unit	
	Tara L. Mayo	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,29,31-36 and 38-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-14 and 38-45* is/are allowed.

6)☒ Claim(s) *29 31-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 29 and 31 through 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Searby (U.S. Patent Publication No. 2005/0074293 A1) in view of Bantz (U.S. Patent No. 4,554,724) and Rivard (U.S. Patent No. 4,812,078).

Searby '293 disclose a method for placing a duct in a surface comprising the steps of: with regard to claim 29,

forming a channel of predetermined width in the surface; and

placing the duct into the channel, thereby forming a friction fit between the duct and the channel over a portion of the length of the cut; and

with regard to claim 32,

further comprising the step of placing a filling material into the channel that overlies the duct, thereby at least partially filling the channel and covering the duct (paragraph 0029).

Searby '293 fails to teach:

the duct having a diameter greater than the predetermined width of the channel;

the surface being a paved surface;

placing a filling material into the channel that overlies the duct, the filling material not previously excavated from the channel;

routing at least one fiber optic cable within the duct;

the duct comprising an inner tube and a jacket, the jacket being formed of a compressible, heat-resistant material; and

the duct being of non-round cross section.

Bantz '724 shows a vehicle guide path system comprising an inductive loop positioned in a slot (2), the system including a mechanical seal (4) and filler (5). As best seen in Figure 1, the prior art shows the seal being pressed against the sidewalls of the slot and further discloses the necessity of a tool to position the seal at a desired depth into the slot (col. 3, line 64 through col. 4, line 5). Bantz '724 further discloses the use of filler and expressly teaches inserting an amount in excess of the volume of the slot to allow for shrinkage (col. 4, lines 5 through 15).

Rivard '078 discloses a process for laying an elongate object in a trench comprising the step of filling the trench with sand (col. 5.ines 36 through 61) along with material previously excavated from the trench (col. 5, lines 15 through 30).

With regard to claim 29, the method disclosed by Searby '293 is capable of being performed on a paved surface. Therefore, it would have been obvious to one having ordinary

skill in the art of cable laying at the time of invention to modify the method disclosed by Searby '293 such that it would have been performed on a paved surface instead of turf since the Examiner takes Official Notice of cable laying operations performed on paved surfaces.

With regard to claim 29, it would have been obvious to one having ordinary skill in the art at the time of invention to form the ducts of inner tubes and jackets since the Examiner takes Official Notice of the same for protecting waveguides.

With regard to claim 29, it would have been obvious to one having ordinary skill in the art at the time of invention to modify the method disclosed by Searby '293 such that it would include the use of a jacket having a major dimension greater than the width of the channel as taught by Bantz '724. The motivation would have been to accommodate shrinking of the jacket after placement.

With regard to claim 29, it would have been obvious to one having ordinary skill in the art at the time of invention to modify the method disclosed by Searby '293 such that it would further include the step of filling the trench with fine sand over the duct as taught by Rivard '078. The motivation would have been to fill the trench with a relatively fine material to reduce the risk of damage to the duct.

With regard to claims 29 and 31, Searby '293 fails to teach a ratio between a channel width and a major dimension of the duct being about 0.95 or less. It would have been obvious to one having ordinary skill in the art of conduits at the time the invention was made through routine experimentation and optimization to determine an optimal width of the channel relative to the duct. The motivation would have been to effect a desired fit of the duct within the channel. Furthermore, it has been held that in the absence of a showing by Applicant that

particular dimensions recited in the claims are critical or provide an unexpected result, the limitations are met by the prior art which is capable of being manufactured to he claimed dimensions. *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990).

With regard to claim 33, because routing fiber optic cables through ducts is a well known expedient in the art, it would have been obvious for one having ordinary skill in the art at the time of invention to modify the method disclosed by Searby '293 such that it would further include the step. The motivation would have been to establish a path for communication lines in the underground duct as desired.

With regard to claim 34, it would have been obvious to one having ordinary skill in the art at the time of invention to make the jacket a foamed material to provide for compression during installation in the channel.

With regard to claim 35, it would have been obvious to one having ordinary skill in the art at the time of invention to make the jacket from a heat resistant material to protect the lines carried by the duct from damage caused by increased temperature.

With regard to claim 36, it would have been obvious to one having ordinary skill in the art at the of invention to make the duct of non-round cross section to provide for enhanced anchoring in the channel.

Allowable Subject Matter

3. Claims 1 through 14 and 38 through 45 are allowed.

4. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 571-272-6992. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TARA L MAYO
PRIMARY EXAMINER
Art Unit 3671

tlm
06 August 2007